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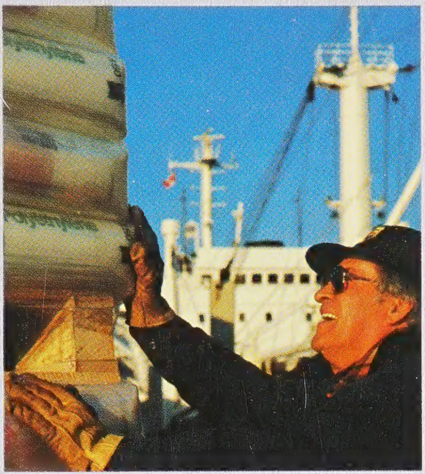
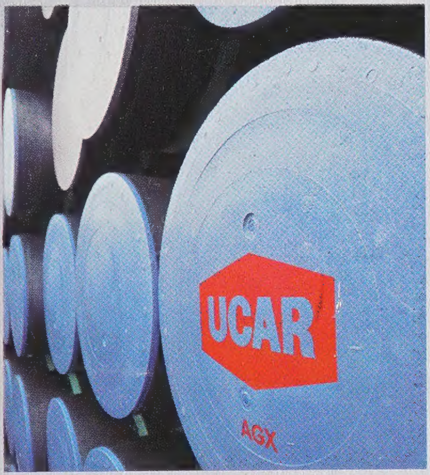
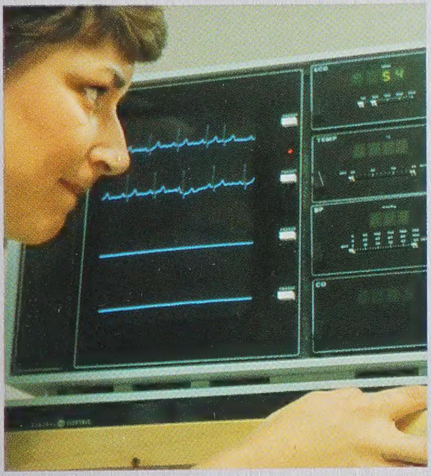
Union Carbide Canada Limited
1981 Annual Report

UNION CARBIDE







Directors

Douglas F. S. Coate
Vice-President, Secretary and General Counsel
Union Carbide Canada Limited
Toronto

†* **Jacques de Billy**
Senior Partner, Messrs. Gagnon, de Billy, Cantin, Martin, Beaudoin & Lesage
Quebec City

* **John S. Dewar**
Chairman and Chief Executive Officer
Union Carbide Canada Limited
Toronto

Alexander I. Hainey
Senior Vice-President
Union Carbide Canada Limited
Toronto

†* **Richard J. Hughes**
Executive Vice-President
Union Carbide Corporation
Danbury, Ct.

W. Norman Kissick
President and Chief Operating Officer
Union Carbide Canada Limited
Toronto

†* **J. Wallace Madill**
Chief Executive Officer
Alberta Wheat Pool
Calgary

†* **Ian D. Sinclair**
Chairman and Chief Executive Officer
Canadian Pacific Enterprises Limited
Montreal

†* **Elio E. Tarika**
Executive Vice-President
Union Carbide Corporation
Danbury, Ct.

†* **James C. Thackray**
President
Bell Canada
Montreal

†* **Richard M. Thomson**
Chairman and Chief Executive Officer
The Toronto-Dominion Bank
Toronto

*Audit Committee
†Compensation Committee

Executive Officers

John S. Dewar
Chairman and Chief Executive Officer

W. Norman Kissick
President and Chief Operating Officer

Ralph C. Addison
Senior Vice-President

Alexander I. Hainey
Senior Vice-President

Bob G. Perry
Senior Vice-President

Robert H. Rastorp
Senior Vice-President

Douglas F. S. Coate
Vice-President, Secretary and General Counsel

Vernon V. Garlick
Vice-President and Treasurer

George A. Kelly
Controller

About Union Carbide Canada

Union Carbide Canada Limited is a diversified manufacturing company with a balanced portfolio of businesses in plastics and chemicals; gases, metals and carbon; and consumer and related products. It is 25 per cent Canadian owned, its common shares being held by approximately 3,700 shareholders. The remaining 75 per cent of the common equity is owned by Union Carbide Corporation, of Danbury, Connecticut. Approximately 5,000 people are employed in Union Carbide plants and offices across Canada.

The Annual Meeting of Shareholders will be held at 11.00 a.m. on Tuesday, April 27, 1982, at the Royal York Hotel, Toronto.

Sur demande, il nous fera plaisir de vous envoyer l'édition française de ce rapport.

Vice-Presidents and General Managers

David R. Barclay
Battery Products

Robert J. Brema
Home and Automotive Products

J. Robert Frank
Food Casings

André G. Lapalme
Hydrocarbons

E.J. Peter Matzen
Chemicals

F. Gordon Murphy
Carbon Products

Thomas R. Pezzack
Films

William D. E. Phillips
Polyethylene

George W. T. Richardson
Metals

Neil F. Weaver
Gas Products

Functional Unit Directors

James P. Gracie, M.D.
Health and Environmental Affairs

George T. Harrap
Safety and Loss Prevention

James M. Neelands
Computing and Telecommunications

Stewart N. Playford
Purchasing and Materials Services

Robert A. Seath
Corporate Communications

Charles W. van Winsen
Human Resources

To Our Shareholders

Union Carbide Canada Limited entered a period of accelerated capital expansion in 1981 in readiness for the improved business opportunities we anticipate as we look beyond the current economic pressures that are depressing earnings.

Total 1981 sales improved modestly, by four per cent over the previous year, to $827.3 million. Gases, Metals and Carbon recorded gains while Plastics and Chemicals were hard pressed to maintain 1980's record sales levels and the Consumer and Related businesses achieved results that were slightly below the previous year.

Sales volumes lost ground during a year of recession in which there was a world-wide glut of hydrocarbon-derived products, notably polyethylene. To compound the problem, the price of ethylene, the most important feedstock and major cost factor in petrochemical production, increased sharply in Canada as a consequence of the Federal Government's energy policy while declining in the United States, Europe and Japan.

Rising operating costs, in the face of over-supplied petrochemical markets with weak product prices, squeezed profit margins, resulting in 1981 net income of $36.1 million, or $1.50 per common share. This compared with $79.6 million, or $3.72 per common share, a year earlier, allowing for the two-for-one stock split last May.

Net income in 1981 included $3.2 million from the settlement of physical damage and business interruption insurance claims at the Beauharnois, Quebec, metals plant. An extraordinary gain of $3.4 million from the sale of a former battery manufacturing facility in Toronto was offset by a loss of similar magnitude incurred in the disposal of the Company's interest in a British Columbia aquaculture operation.

We expect the pressure on sales and earnings to continue in the current year, particularly in Plastics and Chemicals. In many respects, the present situation parallels our experience in the mid-1970's when net income was restrained by lacklustre business conditions during a similar period of major expansion. Historically, petrochemical production has followed a pattern of aggressive growth, followed by a phase of consolidation and then revived progress to new levels of performance.

Last year, we devoted $100 million to the creation of new assets, including engineering and site preparation for our planned world-scale ethylene glycol plant at Prentiss, Alberta; completion of a major expansion to the Fort Saskatchewan air separation facility in Alberta; and consolidation of our battery business into an expanded manufacturing operation at Walkerton, Ontario.

During 1982, we expect to spend in excess of $200 million on new construction, principally for the Alberta ethylene glycol venture and a related air separation plant. This higher level of capital expenditure is part of a previously-announced $750 million commitment during the 1980-85 period.

It is worth noting that, as our organization enters its 75th anniversary year, we are equipped with modern, sophisticated facilities in all of our businesses. Currently, 65 per cent of our investment in manufacturing facilities is less than five years old and 85 per cent is less than ten years old. With such up-to-date plant and equipment, Union Carbide's net worth and cash flow should attain record levels when world economies revive and the Company enters its next cycle of strong growth.

During the past year, we further strengthened our management team through various senior management appointments. These included the naming of W. Norman Kissick as President and Chief Operating Officer. Mr. Kissick joined Union Carbide in 1955 and has been a Vice-President and Director since 1975.

On behalf of the Directors, I would like to congratulate all employees for their record 1981 safety achievement and thank them for their productive contributions during an unusually challenging year. Special acknowledgement should also be paid to Alec Flamm, recently-appointed President of Union Carbide Corporation, who retired from our Board of Directors in 1981 after five years of valued service. In January, 1982, Mr. Flamm was replaced on the Board by J. Wallace Madill, Chief Executive Officer of the Alberta Wheat Pool.

J D Dewar

Chairman and
Chief Executive Officer

Net working capital decreased during 1981 from $228.1 million at the beginning of the year to $147.3 million at year-end. The major factor in the reduction was a change in the Company's cash position. At the beginning of the year, Union Carbide had cash and marketable securities on hand amounting to $26.8 million and no short-term debt. By year-end, the cash and marketable securities had been drawn down and short-term borrowings had increased to $49.2 million.

Two factors caused this change: depressed earnings, resulting from an inability to pass through production cost increases (79 cents per sales dollar in 1981, against 73 cents in 1980); and higher construction and investment expenditures of $115.4 million, compared with the previous year's $67.8 million.

Inventories remained essentially constant while receivables declined by $1.9 million to $147.3 million, largely as a result of the lower fourth-quarter sales. A $32.3 million reduction in accrued tax liabilities was almost totally offset by an increase of $30.4 million in current maturities of long-term debt, reflecting the maturity of an issue of five-year notes on May 1, 1982.

Through Union Carbide's investment program, positions are taken in both upstream and downstream businesses which are strategically important to the Company's operations. No additional cash investments were required as part of this program in 1981 in either of two joint venture ethylene suppliers, Petrosar Limited in Sarnia and Pétromont and company, limited, Montreal.

In preparation for a significantly higher capital program during a period of volatile capital markets, Union Carbide arranged a $300 million line of credit with its two principal bankers in order to provide a flexible financing resource pending an opportunity to enter long-term financial markets. In January, 1982, a $50 million Canadian debenture issue was completed in Europe, with annual interest at 16 per cent and maturity in 1989.

Return on sales for the year was 3.7 per cent, return on invested capital five per cent and return on common shareholders' equity 8.2 per cent. During the period 1977-81, return on sales, invested capital and equity averaged 5.8 per cent, 7.6 per cent and 13 per cent respectively.

The common share dividend was increased, effective June 1, to an annual rate of 70 cents, taking into account the May two-for-one stock split. Common dividends for the year amounted to $13.3 million, or 66 cents per share. Over the past five years, the dividend payout has averaged 35 per cent of earnings for common shareholders. The book value per common share at year-end improved to $18.85 from $18.00 a year ago.

The Year at a Glance

	1981	1980	**1981***	1980
	(thousands of dollars)		(per common share)	
Sales	**$827,306**	$794,824		
Net income	**36,139**	79,612		
Earnings for common shareholders	**30,200**	74,503	**$1.50**	$3.72
Dividends on common shares	**13,253**	10,750	**0.66**	0.54
Funds from operations	**81,307**	116,395	**4.05**	5.55
Fixed asset additions	**100,017**	58,913		
Total assets	**920,362**	864,050		
Common shareholders' equity	**378,656**	361,124	**18.85**	18.00
Return on sales	**3.7%**	9.4%		
Return on invested capital**	**5.0%**	13.8%		
Return on common shareholders' equity**	**8.2%**	22.6%		

*Effective May 15, 1981, the common shares were subdivided on a two-for-one basis. All references to common shares in this annual report give effect to this subdivision.

**Based on average of beginning and end-of-year figures. Invested capital includes short-term debt, long-term debt and shareholders' equity.

Plastics and chemicals registered a marginal sales decline in 1981, following the dramatic improvements recorded during the previous two years.

The group's performance was restrained by a world-wide oversupply of petrochemical feedstocks and products that resulted from an international glut of crude oil. In sharp contrast with other world petrochemical production centres, the cost of ethylene, the principal raw material for polyethylene and more than 20 different groups of chemicals manufactured by the Company, rose substantially in Canada as a consequence of energy pricing policies. This additional cost could not be recovered in selling prices.

Export prices for polyethylene resins declined through the year and, at year-end, were 20 per cent below 1980 levels. In the domestic market, prices softened by as much as 25 per cent. Volumes, however, posted gains both in Canada and offshore.

An $18 million construction and modification program began at the Company's world-scale polyethylene plant in Moore Township, Ontario, and is scheduled for completion in mid-1982. The program will introduce to Canada Union Carbide's proprietary, energy-efficient UNIPOL linear low-density polyethylene technology and increase the plant's capacity by 50 million pounds to 450 million pounds a year.

The Moore Township plant, near Sarnia, Ontario, is currently being modified to utilize Union Carbide Corporation's proprietary UNIPOL process which produces linear low-density polyethylene with only one quarter of the energy required by conventional systems.

This shipment of polyethylene was bound for Shanghai in the People's Republic of China. Polyethylene was shipped to 35 countries in 1981 as export volume increased six per cent over the previous year.

Chemicals sales also were affected by global over-supply and pressure on pricing. In Canada, the problem was heightened by a low demand for automotive anti-freeze, which uses ethylene glycol as its major ingredient.

Initial expenditures were incurred for the new, $320 million plant at Prentiss, Alberta. The Prentiss facility will convert ethylene from the province's abundant ethane supply into ethylene glycol for use in the production of polyester fibre and anti-freeze. The bulk of its output will be exported. Major approvals for the plant were received and site preparation began in the fall. Start-up is scheduled for mid-1984.

Union Carbide's two joint-venture, oil-based feedstock suppliers in Eastern Canada, Petrosar Limited and Pétromont and company, limited, performed satisfactorily under mounting competition from U.S. producers, who relied primarily on price-controlled natural gas as a feedstock.

Gases, Metals and Carbon

Gases, Metals and Carbon achieved a 13 per cent sales gain despite a weakening economy and a lengthy labour disruption at a major steel producing customer.

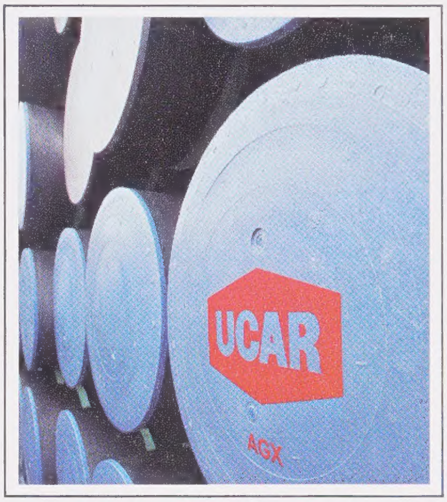
The gases business produces atmospheric gases for wide-ranging uses in such fields as oil and gas recovery and processing, steelmaking and health care. As well, it manufactures and markets welding and cutting equipment and high-technology stream separation systems.

Sales of gases and related products advanced in response to continuing market demand for products and processes that improve productivity, reduce costs or conserve energy resources. Margins reflected an inability to increase prices sufficiently to totally offset higher costs.

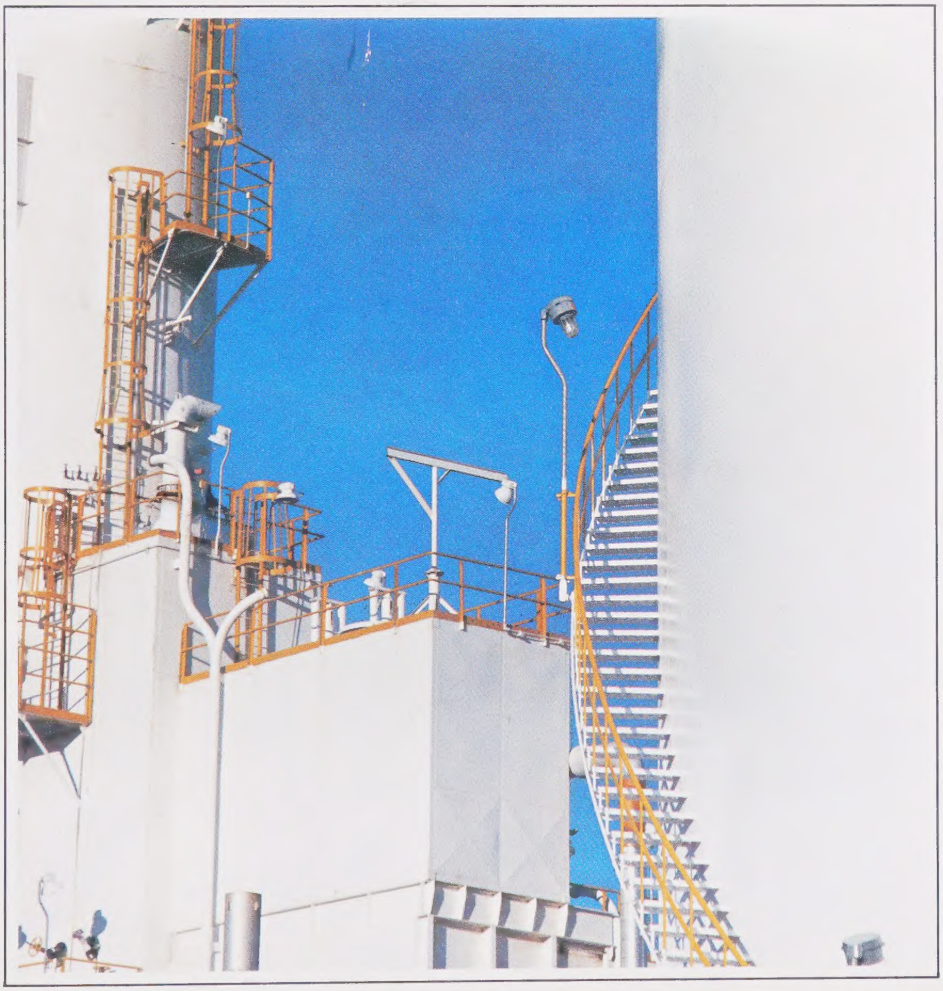
An air separation plant at Fort Saskatchewan, Alberta, which is the largest in Western Canada, was further expanded. Liquid oxygen and nitrogen capacity was more than doubled to serve rapidly-growing Western markets.

Design engineering commenced for a $50 million air separation plant on the site of the Prentiss, Alberta, chemical facility. It will supply gaseous oxygen and nitrogen to the chemical plant, beginning in mid-1984, and liquid oxygen and nitrogen to customers throughout Western Canada.

At Oakville, Ontario, construction started on a hydrogen facility to serve the specialty steel, food processing and oil refining industries. The plant, which will be completed in mid-1982, will further broaden the Company's product line of gases.



Graphite electrodes, manufactured at the Welland, Ontario, plant, are used in electric arc steel furnaces. The output of the electric arc process has grown at more than twice the rate of steel production generally during the last ten years.



Increasing demand from Alberta markets prompted a major expansion of the Fort Saskatchewan, Alberta, air separation plant that more than doubled liquid oxygen and nitrogen production capacity.

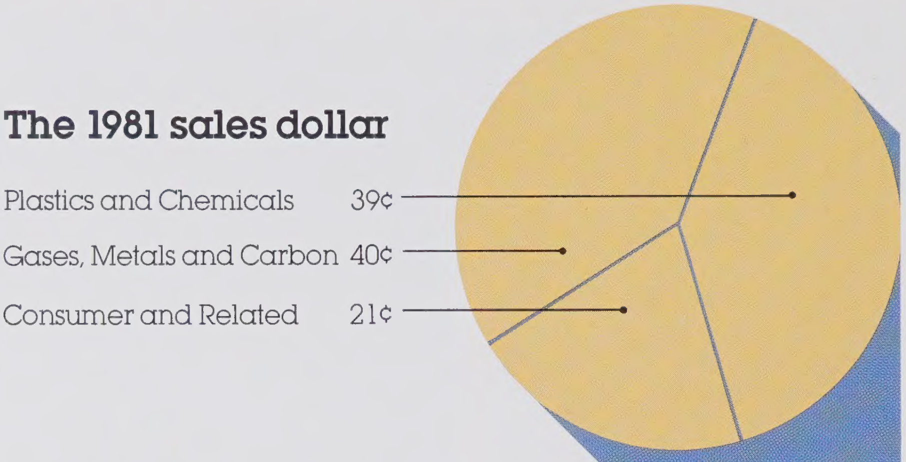
Ferroalloys are Union Carbide's principal metal product and their demand is directly related to the level of activity in the steel, aluminum and iron foundry industries in which they are used. Although Canadian steel output declined in 1981, primarily because of a prolonged strike at a major producer and increased activity by offshore steelmakers following a world downturn in demand for steel products, sales of ferroalloys moved ahead in both export and domestic markets. An agreement was signed early in the year with a group headed by Elkem a/s, of Norway, giving Elkem the option to purchase the Company's Canadian ferroalloy operations by the end of 1987. Concurrently, the ferroalloy business of Union Carbide Corporation in the U.S. and Norway was sold to the same group. In a related transaction, $28 million of Union Carbide Canada's ferroalloy inventory was sold to Elkem at mid-year.

Union Carbide's major carbon product is graphite electrodes, which are used to carry power into electric arc steel furnaces. The Company also produces other carbon and graphite products for the iron, ferroalloy, aluminum and artificial abrasive industries.

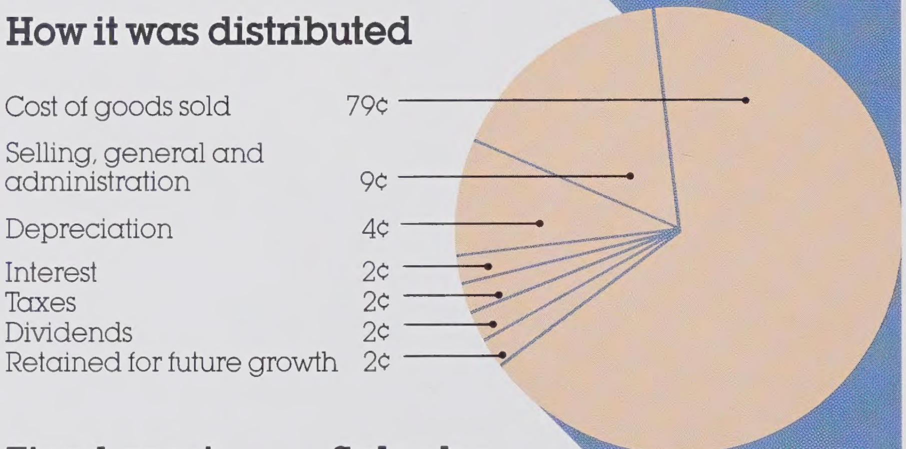
High market demand for carbon products at the outset of 1981 eased as the year progressed, largely because of general economic conditions and the steel strike. As a result, overall sales virtually repeated 1980's performance with prices remaining generally firm.

The weakened environment for steel and construction is expected to continue through the first half of 1982. This, coupled with a higher level of competitive activity and a heavy labour bargaining schedule at major customers, is expected to constrain graphite electrode shipments to 1981 levels.

The 1981 sales dollar



How it was distributed

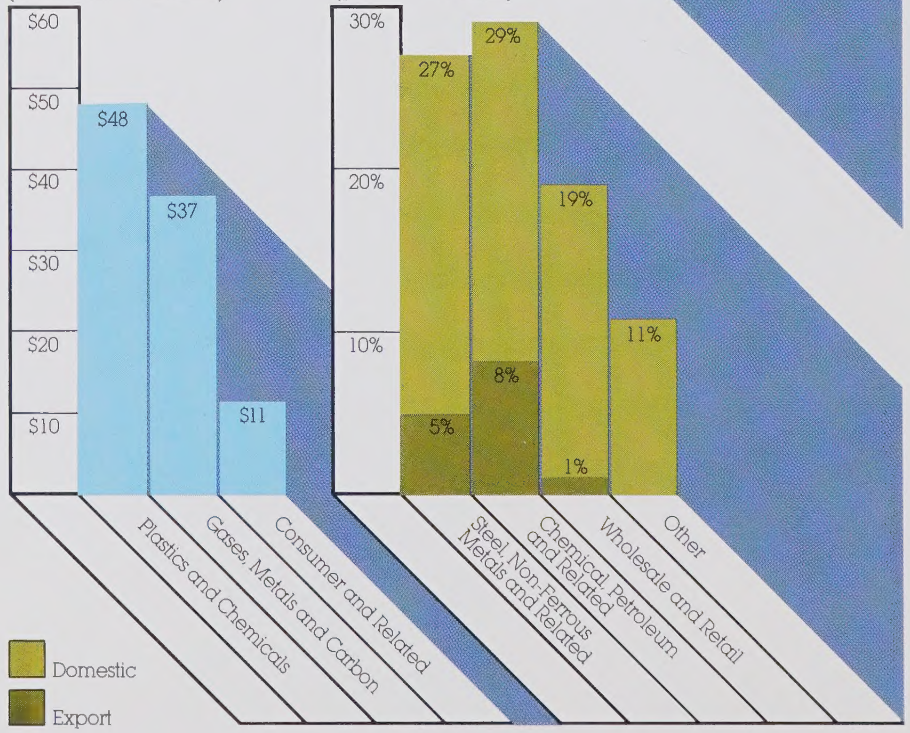


Fixed asset additions

(in millions of dollars)

Sales by markets

(per cent of sales)



The 1981 performance of Union Carbide's consumer products businesses reflected the cautious consumer buying attitudes that accompany a period of economic downturn and high inflation. Sales were two per cent below the prior year and earnings declined significantly, particularly in the anti-freeze business.

GLAD home product sales outpaced the industry average, however, and volume increases were particularly evident in the rolled wrap and freezer bag categories. A new garbage bag was introduced in Ontario late in the year under the trade name SŪRTEC. Made of thinner gauge but extremely tough high-density polyethylene, the product met with encouraging consumer acceptance.

ENERGIZER AND EVEREADY batteries achieved higher sales, although the performance of this business was affected by the costs of consolidating manufacturing into a single, modern plant at Walkerton, Ontario. By year-end, a $9 million expansion of that facility, which was part of the consolidation program, was essentially complete. New, specialized lithium batteries were introduced for use in calculators, watches and cameras and a line of ENERGIZER flashlights also was launched during the year.

New contender in the garbage bag market is SŪRTEC. The first such product in Canada to be manufactured from high-density polyethylene, it is tougher and more puncture resistant than conventional bags.

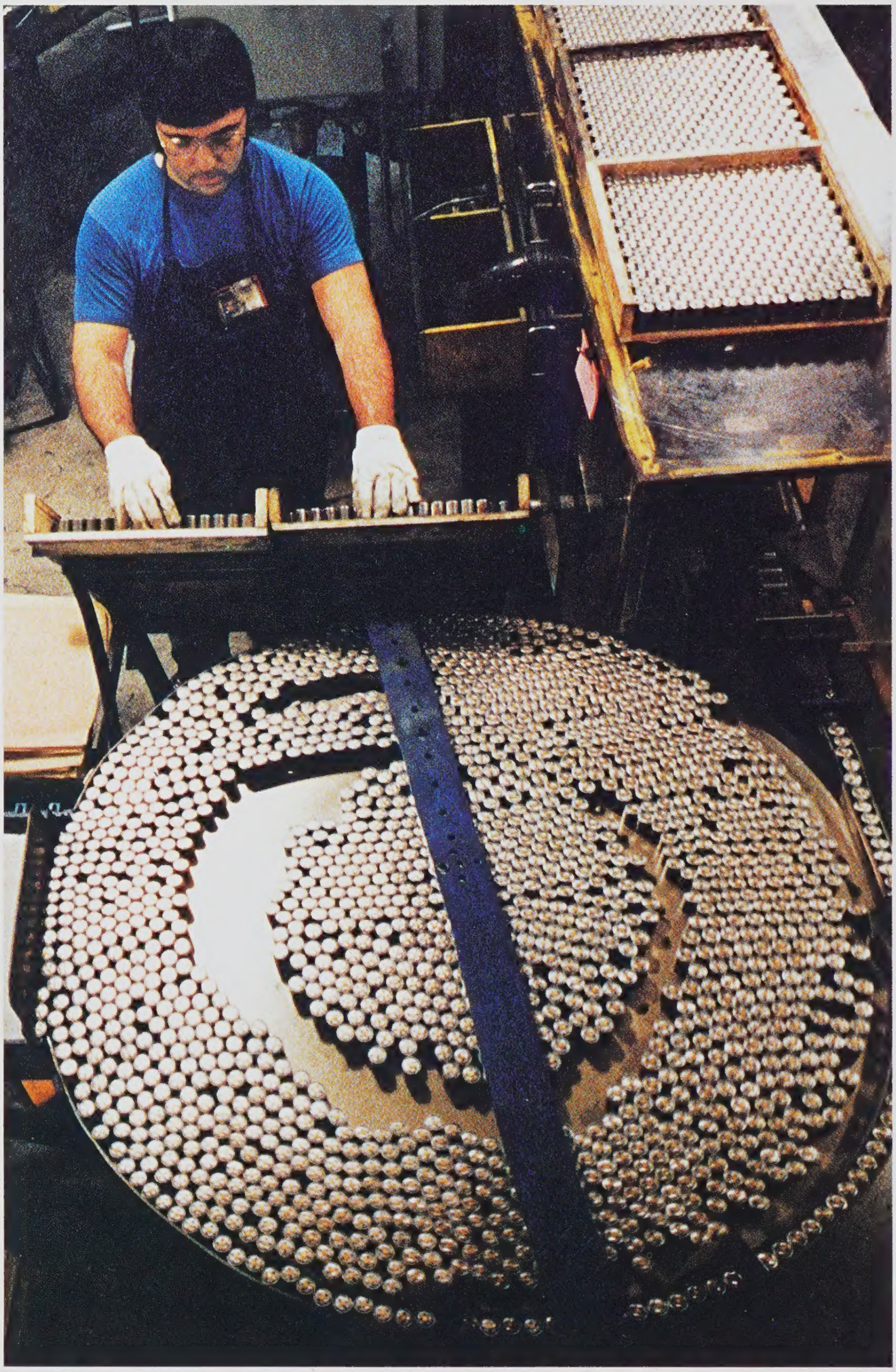
Sales of PRESTONE II and UCAR anti-freeze declined as a result of a combination of lower market demand, an increase in Canadian antifreeze production capacity and an inventory cutback by retailers. Prices were constrained by the world-wide, over-supply of hydrocarbon-based products.

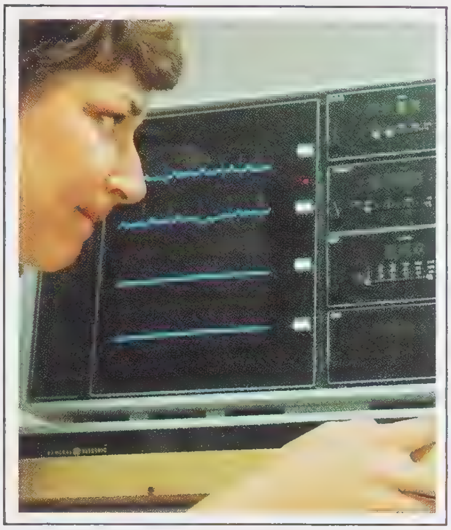
A refurbishing of anti-freeze mixing facilities at Montreal East was completed during the year to ensure efficient mixing of the complex formulas demanded by today's automobile engines, with their higher operating temperatures and increased aluminum content.

Film product sales showed an appreciable improvement, although margins were reduced by higher raw material costs early in the year. Programs were initiated to expand embossed film capacity at Lindsay, Ontario, and install high-density film manufacturing equipment at Cowansville, Quebec. Both will be completed in 1982.

Food casing sales were comparable to those of the previous year as the Canadian processed meat industry recorded little growth and exports declined. Efficiency improvements implemented in the Lindsay casings operation are expected to have a positive influence on performance in 1982.

Manufacturing of ENERGIZER and EVEREADY batteries, previously located at Walkerton, Ontario, and Toronto, was consolidated at Walkerton following a $9 million expansion there.





A computerized cardiac monitor donated by Union Carbide to a Welland, Ontario, hospital has several functions but, most importantly, it allows the medical staff to detect potential heart failure much earlier than before

Union Carbide is committed to improving the skills and knowledge of its employees to meet the ever-increasing business need for superior performance. To this end, about 1,000 employees took part in a broad spectrum of seminars and workshops during 1981. In particular, strong emphasis was placed on programs designed to assist first-line supervisors in further improving their effectiveness.

The Company's performance appraisal program continued to receive wide-spread acceptance and has contributed greatly to human resource planning and equitable compensation programs. The appraisal program has been in operation for a decade and now encompasses all salaried employees.

The Company's pension plan was significantly enhanced during the year and a pre-retirement planning program, introduced in 1980, was extended to more locations across Canada.

The health and safety of employees remained a major priority and, in 1981, important improvements were made in the effort to reduce work-related accidents. Even though the previous year established a record for safety performance, a new record was achieved as the total number of work-related accidents in 1981 was reduced by a further 27 per cent and injuries that caused absence from work were cut by 55 per cent.

The Company also continued its work to provide healthy conditions in and around its plants and to ensure the safe handling and use of its products after they leave these facilities. A new initiative in 1981 was the introduction of an advanced technique of noise measurement to supplement the overall program of hearing conservation and noise control.

Union Carbide remains at the forefront of industrial energy conservation in Canada and is a major contributor to the national drive to reduce energy demand. There were intensified activities to build on the Company's already impressive recurring energy savings of $11.3 million a year that had been achieved by year-end 1981. As well as optimizing energy efficiency at its own plants, Union Carbide continued to encourage and assist other Canadian organizations in their conservation programs.

Union Carbide's vital and creative role as a responsible citizen extends well beyond energy conservation. In addition to supporting health, welfare, cultural and educational bodies on a corporate level, the Company takes part in a wide range of local community activities; in 1981, these varied from the donation of a computerized cardiac monitoring unit needed for patients in a Welland, Ontario hospital to the formulation of a program to preserve a bird sanctuary at Prentiss, Alberta.

Management Report

Union Carbide Canada Limited's 1981 Annual Report and the financial statements, included therein, were prepared by the Company's management and approved by its Board of Directors. The Audit Committee of the Board is responsible for reviewing and monitoring the Company's accounting and reporting practices, audit plans and findings and internal controls.

The consolidated financial statements contained in the 1981 Annual Report have been prepared in accordance with generally accepted accounting principles appropriate in the circumstances. The Company's auditors, Thorne Riddell, are responsible for auditing and reporting on these statements.

All information in the Annual Report is consistent with the financial statements included therein.

Auditors' Report

To the Shareholders of Union Carbide Canada Limited

We have examined the consolidated balance sheet of Union Carbide Canada Limited as at December 31, 1981 and the consolidated statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at December 31, 1981 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Thorne Riddell
Chartered Accountants

Toronto, Canada
January 22, 1982

The notes on pages 14 to 19 are an integral part of this statement.

Consolidated Statement of Income and Retained Earnings

	Year ended December 31 1981	1980
	(thousands of dollars)	
Sales	**$827,306**	$794,824
Cost of goods sold	**657,716**	577,581
Selling, general and administrative expenses	**75,078**	58,908
Depreciation	**33,084**	29,168
Interest	**22,060**	15,391
Interest capitalized during construction	**(3,058)**	(304)
	784,880	680,744
	42,426	114,080
Investment and other income	**5,447**	6,075
Share of income of companies carried at equity	**2,414**	2,107
Share of income of Pétromont and company, limited	**6,590**	2,045
	14,451	10,227
Income before income taxes	**56,877**	124,307
Income taxes	**20,749**	44,695
Income before extraordinary items	**36,128**	79,612
Extraordinary items (note 4)	**11**	—
Net income	**36,139**	79,612
Retained earnings at beginning of year	**300,754**	237,001
	336,893	316,613
Dividends — preferred	**5,939**	5,109
— common	**13,253**	10,750
	19,192	15,859
Retained earnings at end of year	**$317,701**	$300,754
Earnings per common share (in dollars)	**$ 1.50**	$ 3.72

The notes on pages 14 to 19 are an integral part of this statement.

Consolidated Statement of Changes in Financial Position

	Year ended December 31 1981	 1980
	(thousands of dollars)	
Working capital derived from		
Operations		
Income before extraordinary items	$ 36,128	$ 79,612
Items not affecting working capital		
Depreciation	33,084	29,168
Deferred income taxes	21,748	10,894
Share of unremitted income of investments carried at equity	(7,572)	(2,352)
Gain on disposal of capital assets	(2,081)	(927)
Funds from operations	81,307	116,395
Proceeds from common shares	585	478
Proceeds on disposal of capital assets	5,620	5,393
Other	351	2,251
	87,863	124,517
Working capital applied to		
Fixed assets	100,017	58,913
Dividends	19,192	15,859
Investments	15,408	8,874
Long-term debt	34,086	5,250
	168,703	88,896
Increase (decrease) in working capital	(80,840)	35,621
Working capital at beginning of year	228,116	192,495
Working capital at end of year	$147,276	$228,116
Changes in components of working capital		
Cash and short-term investments	$(26,798)	$(13,416)
Receivables	(1,851)	31,185
Inventories	(588)	64,477
Prepaid expenses	679	2,264
Accounts payable	(4,989)	(21,689)
Short-term debt	(49,200)	—
Current portion of long-term debt	(30,350)	(400)
Income and other taxes	32,257	(26,800)
	$(80,840)	$ 35,621

The notes on pages 14 to 19 are an integral part of this statement.

Consolidated Balance Sheet

	December 31 1981	1980
	(thousands of dollars)	
Assets		
Current assets		
Cash and short-term investments	**$ —**	$ 26,798
Receivables	**147,270**	149,121
Inventories	**193,048**	193,636
Prepaid expenses	**8,124**	7,445
Total current assets	**348,442**	377,000
Fixed assets	**482,234**	415,884
Investments	**84,307**	68,379
Other assets	**5,379**	2,787
	$920,362	$864,050
Liabilities		
Current liabilities		
Accounts payable	**$118,522**	$113,533
Short-term debt	**49,200**	—
Current portion of long-term debt	**31,500**	1,150
Income and other taxes	**1,944**	34,201
Total current liabilities	**201,166**	148,884
Long-term debt	**112,750**	148,000
Deferred income taxes	**167,790**	146,042
	481,706	442,926
Shareholders' equity		
Capital stock	**120,955**	120,370
Retained earnings	**317,701**	300,754
	438,656	421,124
	$920,362	$864,050

Approved by the Directors
Signed: "J.S. Dewar"
"J. de Billy"

The notes on pages 14 to 19 are an integral part of this statement.

1. Supplementary balance sheet detail

		December 31	
		1981	1980
Inventories	Raw materials and supplies	**$ 39,767**	$ 37,082
	Work in process	**60,943**	48,693
	Finished goods	**92,338**	107,861
		193,048	193,636
Fixed assets	Land	**12,434**	8,446
	Buildings	**105,349**	99,782
	Machinery and equipment	**615,383**	532,908
	Gross fixed assets	**733,166**	641,136
	Accumulated depreciation	**250,932**	225,252
	Net fixed assets	**482,234**	415,884
Long-term debt	Unsecured debentures		
	8⅜% due May 1, 1992	**21,250**	22,000
	10¾% due June 15, 1995	**69,000**	72,000
	9¼% due May 1, 1982	**—**	30,000
	9¾% due May 1, 1986	**22,500**	24,000
		112,750	148,000

Maturities and sinking fund requirements for the next five years are as follows:

1982 - $31,500,000; 1983 - $5,250,000; 1984 - $5,250,000;
1985 - $5,250,000; 1986 - $20,250,000.

	Interest on long-term debt	**14,924**	15,391

Capital stock

Effective May 15, 1981, the common shares were subdivided on a two-for-one basis. All references to common shares in these consolidated financial statements have been adjusted to give retroactive effect to this subdivision.

Authorized
Preferred — 6,000,000 shares issuable in series
Common — unlimited

Issued	**1981**		1980	
	Shares	**Amount**	Shares	Amount
Preferred Series A	**2,400,000**	**$ 60,000**	2,400,000	$ 60,000
Common	**20,088,536**	**60,955**	20,058,402	60,370
		120,955		120,370

The preferred shares Series A are redeemable at the option of the Company and are retractable at the option of the holder on June 1, 1987, in each case at a price of $25 per share plus any unpaid dividends. They have a cumulative preferential floating rate dividend which is adjusted and payable quarterly at a rate which is applied to $25 and is equal to the sum of 1¼% plus ½ of commercial bank prime interest rate.

In 1981, under the long-term stock purchase plan, 30,134 common shares were issued for $585,000 (32,172 shares for $478,000 in 1980) to the trustee holding shares for participating senior management employees. The Company, under the terms of this plan, made interest-free loans to such employees of the full purchase price of the shares.

2. Summary of significant accounting policies

Principles of consolidation

The financial statements of all significant subsidiaries are consolidated with those of the Company. Investments carried at equity in net assets comprise entities owned 25 to 50 per cent as well as subsidiaries which are not significant. Other investments are carried at cost.

Short-term investments

Short-term investments are carried at cost, which approximates market.

Inventories

Inventory values do not include depreciation of fixed assets and are stated at the lower of average cost and net realizable value.

Fixed assets and depreciation

Fixed assets are carried at cost. Cost includes interest on debt attributable to major projects under construction. Expenditures for replacements are capitalized and the replaced items are retired. Maintenance and repairs are charged to current operations. Fixed assets are depreciated on the straight-line method over their estimated useful service life after they become operative. This results in a composite depreciation rate of 6%.

Income taxes

The Company uses the deferral method of tax allocation to provide for income taxes. The time in which transactions affect taxable income frequently differs from the time in which they enter into the determination of income in the financial statements. The cumulative differences between taxes provided and taxes payable are shown under deferred income taxes on the consolidated balance sheet.

Investment tax credits are included in income in the year they are claimed for tax purposes as a reduction in the current income tax provision.

Translation of foreign currencies

Cash, receivables and accounts payable denominated in foreign currencies are translated into Canadian dollars at year-end exchange rates. All other assets and liabilities, as well as income and expenses, are translated at rates prevailing at the month-end prior to the transaction date.

3. Investments

	1981	1980
Petrosar Limited, at cost	**$48,367**	$48,367
Other investments, at cost	**5,288**	3,789
Pétromont and company, limited, a limited partnership, at equity	**13,576**	6,980
Other investments, at equity	**17,076**	9,243
	84,307	68,379

The Company has a 20% common share interest in Petrosar Limited which had net income of approximatly $38 million in 1981 ($47 million in 1980) before the provision for preference share dividends of approximately $45 million ($38 million in 1980).

Petrosar Limited has issued Class "A" preference shares which carry the right to a cumulative preferential floating rate dividend and are retractable over a period expiring December 31, 1987. The Company is committed to advance 30.4% of any funds necessary to make up any deficiency in meeting the financial obligations of Petrosar to pay dividends on and redeem these shares. Union Carbide Corporation has agreed to advance to the Company 33.2% of any funds the Company is required to pay under this commitment. The net funds advanced by the Company were nil in 1981 and $1,218,000 in 1980.

The following is a financial summary of those entities carried at equity:

	1981	1980
Total assets	**$215,136**	$213,544
Total liabilities	**105,739**	121,398
Net assets	**109,397**	92,146
UCCL equity in net assets	**30,652**	16,223
UCCL equity in income	**9,004**	4,152

4. Extraordinary items

	1981
Gain on sale of property, net of related income taxes of $238,000	**$3,437**
Loss of disposal of investment, net of related income taxes of $1,852,000	**(3,426)**
	11

5. Related party transactions

	Union Carbide Corporation		Companies accounted for by equity method	
	1981	1980	**1981**	1980
Sales to	**$18,288**	$81,986	**$32,967**	$29,801
Purchases from	**99,334**	86,000	**15,955**	23,561
Royalties paid to	**11,955**	11,103	**—**	—
Balances with related parties				
Accounts receivable from			**$ 9,112**	$33,004
Accounts payable to			**26,773**	27,563
Short-term debt			**46,200**	—

Settlements with related parties are made on terms similar to those made with non-related parties.

6. Commitments

a) The Company has granted an option for the purchase of the inventories and plants of its metals business at Beauharnois and Chicoutimi, Quebec. The option expires December 31, 1987. In the month following the expiry of the option, the Company may require the option holder to purchase these assets. The sale transaction will be subject to allowance under the Foreign Investment Review Act. The transaction is not expected to significantly affect the financial performance of the Company.

In a related transaction, the Company sold U.S. $23 million of the inventory of its metals business and agreed to pay the purchaser's cost of financing this inventory.

b) The Company has commenced construction of a petrochemical plant at Prentiss, Alberta, which will involve additional expenditures of approximately $300 million (excluding capitalized interest) to the completion of the plant in 1984.

7. Employee retirement program

The Company charges to operations annually current service costs, and a portion of past service costs of the employee retirement program. Pension expense is calculated as a percentage of annual payroll costs. Experience gains will be applied to maintain the percentage, while experience losses will be added to the unfunded liability. Total pension expense for the year was $9,772,000 ($8,336,000 in 1980).

The unfunded liability is the excess of the actuarial liability over the actuarial value of plan assets. During the year, changes were made in the funding method, actuarial assumptions and plan provisions resulting in an unfunded liability at January 1, 1981 of $20,503,000 ($21,795,000 in 1980) which is being amortized over fifteen years in accordance with current pension legislation.

8. Segmented information

The Company has three major business segments, as determined by the Board of Directors and recorded in the minutes of a meeting thereof: (1) Plastics and Chemicals, (2) Gases, Metals and Carbon and (3) Consumer and Related. These segments were determined based upon the similarity or close relationship in each segment of certain factors, including the following: nature of markets, common production and distribution facilities, and type of raw materials used. Inter-segment sales are accounted for at prices comparable to open market prices for similar products and services. The following is a summary of financial information for each segment:

	Plastics and Chemicals		Gases, Metals and Carbon	
	1981	1980	**1981**	1980
Sales to customers	**$320,486**	$322,800	**$333,606**	$294,839
Inter-segment sales	**53,899**	63,484	**3,212**	3,359
Total sales	**374,385**	386,284	**336,818**	298,198
Operating profit	**16,612**	85,267	**62,933**	55,141
General corporate expense				
Interest on debt				
Share of income of companies carried at equity				
Income taxes				
Extraordinary items				
Net income				
Identifiable assets	**449,807**	402,731	**308,421**	299,025
Fixed asset additions	**47,589**	9,817	**36,560**	38,300
Depreciation	**15,047**	14,466	**14,385**	12,082
Export sales				

9. Subsequent event

In January, 1982 the Company sold, in Europe, $50,000,000 aggregate principal amount of 16% Debentures due January 15, 1989.

Consumer and Related		Corporate		Consolidated	
1981	1980	1981	1980	1981	1980
$173,214	$177,185			$827,306	$794,824
373	277				
173,587	177,462				
4,399	22,226			83,944	162,634
				(10,479)	(25,347)
				(19,002)	(15,087)
				2,414	2,107
				(20,749)	(44,695)
				11	—
				36,139	79,612
104,626	92,938	57,508	69,356	920,362	864,050
11,162	9,016	4,706	1,780	100,017	58,913
3,008	2,232	644	388	33,084	29,168
				113,654	104,008

Five Year Summary

For the Year (thousands of dollars)	**1981**	1980**	1979	1978	1977
Sales					
Plastics and Chemicals	**$320,486**	$322,800	$290,967	$195,967	$124,771
Gases, Metals and Carbon	**333,606**	294,839	236,911	209,015	178,071
Consumer and Related	**173,214**	177,185	158,041	123,225	103,694
	827,306	794,824	685,919	528,207	406,536
Net Income	**36,139**	79,612	57,814	20,089	20,500
Dividends					
Preferred	**5,939**	5,109	4,232	3,359	804
Common	**13,253**	10,750	9,251	9,000	9,000
Net income reinvested	**16,947**	63,753	44,331	7,730	10,696
Funds from operations	**81,307**	116,395	122,436	55,205	45,182
Fixed asset additions	**100,017**	58,913	30,074	46,270	82,299
Depreciation	**33,084**	29,168	32,032	24,992	18,104
At Year-End (thousands of dollars)					
Total assets	**920,362**	864,050	745,286	672,668	619,331
Working capital	**147,276**	228,116	192,495	118,780	130,083
Common shareholders' equity	**378,656**	361,124	296,893	252,270	244,540
Per Common Share (in dollars)					
Earnings	**1.50**	3.72	2.68	0.84	0.97
Dividends	**0.66**	0.54	0.46	0.45	0.45
Net income reinvested	**0.84**	3.18	2.22	0.39	0.54
Funds from operations	**4.05**	5.55	5.91	2.59	2.22
Equity	**18.85**	18.00	14.83	12.62	12.23
Market price (Toronto Stock Exchange)*					
High	**24.00**	22.00	13.63	9.66	9.63
Low	**13.50**	12.75	8.75	8.31	8.13
Financial Ratios (per cent)					
Return on sales	**3.7**	9.4	7.8	3.2	4.8
Return on invested capital***	**5.0**	13.8	10.9	3.6	4.7
Return on common shareholders' equity***	**8.2**	22.6	19.5	6.7	8.1
Common dividends as per cent of earnings	**43.9**	14.4	17.3	53.8	46.3
Other					
Number of common shareholders at year-end	**3,700**	3,800	4,200	4,900	5,200
Average number of employees	**5,095**	5,004	4,791	4,704	4,695
Wages and salaries (thousands of dollars)	**$133,483**	$115,187	$ 94,566	$ 85,880	$ 80,621

* On May 15, 1981 the Company's common shares were subdivided on a two-for-one basis.

** Changes in accounting policies effective January 1, 1980 favourably affected net income by $11.3 million ($0.57 per common share).

*** Based on average of beginning and end of year figures. Invested capital includes short-term debt, long-term debt and shareholders' equity.

Plants	Products
Plastics and Chemicals	
Moore Township, Ontario/ Montreal East, Quebec	UNION CARBIDE Low- and High-Density Polyethylene Resins/Co-Polymers/ Vulcanizable and Semi-Conductive Compounds/Polyethylene Powders/ Cellular Polyethylene/Polysulfone Resins
Montreal East, Quebec	UNION CARBIDE Organic Chemicals, including Ethylene Oxide, Alkanolamines, Glycols and Glycol Ethers/Silicone Chemicals and Oils/Urethane Foam Intermediates/UCAR Solution Vinyl Resins/CELLOSIZE/CARBOWAX Polyethylene Glycols/ UCON Lubricants/UCAR Latices/Propylene
Gases, Metals and Carbon	
Vancouver and Vernon, British Columbia/Calgary, Edmonton and Fort Saskatchewan, Alberta/Saskatoon, Saskatchewan/Selkirk and Transcona, Manitoba/Brampton, London, Mississauga, Oakville, Ottawa, Sarnia, Sault Ste. Marie and Thunder Bay, Ontario/ Arvida, Contrecoeur, Lauzon, Montreal, Montreal East, Noranda, Sept-Iles, Tracy and Varennes, Quebec/Saint John, New Brunswick/Halifax, Nova Scotia	LINDE Oxygen, Nitrogen, Hydrogen, Argon, Helium, Carbon Dioxide and Rare Gases/Specialty Gas Mixtures/Fumigants and Sterilants/Calcium Carbide and Acetylene/Liquefied Hydrocarbon Fuel Gas/Gas and Electric Welding, Cutting, Forming and Heat-Treating Apparatus/Welding Rods, Wire and Electrodes/Power Sources/ Heat Exchangers/Steel-Conditioning Machines/Rock-Piercing and Shaping Equipment/Medical and Home Care Gases/Inhalation and Suction Therapy Equipment/Cryogenic Equipment/Cryogenic Equipment Repair Facilities/Food Freezing Equipment/Molecular Sieves/Hydrogen Upgrading and other Refinery Systems/High-Flux Tubing/Distillation Trays
Beauharnois and Chicoutimi, Quebec	Ferroalloys, Alloying Metals, Pure Metals and Metal Compounds produced from the elements Boron, Calcium, Chromium, Manganese, Silicon, Titanium, Tungsten, Vanadium and Zirconium
Mississauga and Welland, Ontario	Electric Arc Furnace Electrodes/Cathode Blocks/Electrolytic Cell Anodes/Furnace Linings/Electric Motor and Generator Brushes/Carbon and Graphite Products for chemical, electrical, mechanical and metallurgical applications
Consumer and Related	
Lindsay, Orangeville and Walkerton, Ontario/ Cowansville, Quebec	ENERGIZER and EVEREADY Batteries, including Alkaline, Manganese, Carbon Zinc, Silver Oxide, Mercuric Oxide, Nickel Cadmium and Lithium/EVEREADY and ENERGIZER Flashlights, Lanterns and Bulbs/GLAD Food Wrap, Bags and Garbage Bags/GLAD Cupboard Unit/SŪRTEC Garbage Bags/PRESTONE II Anti-Freeze and Summer Coolant/PRESTONE Car Care Products/Polyethylene Film/VISKING Cellulose Food Casings/VISTEN and PERFLEX S Specialty Films

Union Carbide Canada Limited

Head Office	123 Eglinton Avenue East Toronto, Canada M4P 1J3
Stock Transfer Agent and Registrar	Canada Permanent Trust Company
Stock Exchange Listings	Montreal, Toronto and Alberta
Auditors	Thorne Riddell

For 75 years a Canadian innovator

Union Carbide is marking its 75th anniversary in Canada in 1982 and, as much as anything, it is a celebration of the strong spirit of innovation that has been basic to the organization since its earliest days. Thanks in large measure to the ingenuity of its people, the company has grown from a single-furnace ferroalloy operation in Welland, Ontario to a Canada-wide manufacturer of plastics, chemicals, gases and welding products, carbon and graphite, metals, polyethylene films, food casings and consumer products serving an immense variety of markets in this country and overseas. But each year, one factor remains constant: the awareness that technological innovation is a most important key to success.

A beacon to signal the birth

There was nothing remarkable about the land where Union Carbide had its beginnings — just a flat, swampy patch of scrub by the side of the Welland Canal in southwestern Ontario — but by the early 1900's the area held out an enticing invitation to industrialists with ambition and imagination.

It offered major transportation links by road, water and three railways, cheap electric power from nearby Niagara and the promise of the burgeoning U.S. market.

Welland, 1907

In May, 1907, a site was cleared for a building and, shortly afterwards, Canada's first ferroalloy furnace went into operation, producing ferrosilicon.

A local journalist noted that it lit up the night sky like a beacon signalling the birth of a whole new industry. It was unlikely, though, that anyone could have imagined the size and scope of the organization that was to grow out of that development.

Filling a need for electrodes

Darte (extreme right) with colleagues and electrodes

Turnbull

The man in charge of the Welland ferroalloy project was an ebullient Scottish engineer named Robert Turnbull, who had worked with electric arc furnaces in France.

When he came to Welland, his French connections were still strong and, once the plant was operating, he recruited Frenchman Emile Darte to run it.

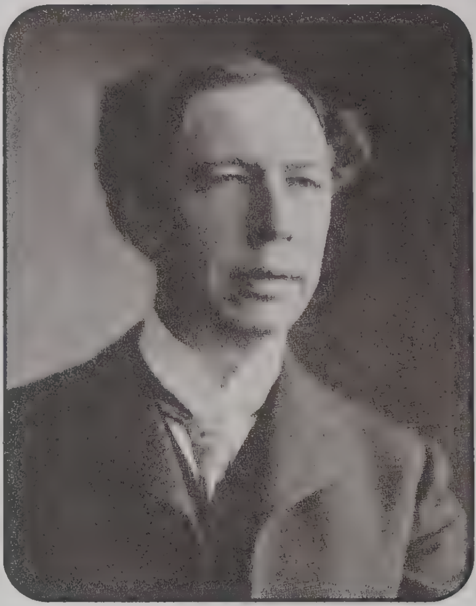
Turnbull went on to found 11 steel and related companies; one of them, a ferroalloy facility in Beauharnois, Quebec, was purchased by Union Carbide in 1938.

Darte possessed a sound understanding of the technology behind the carbon electrodes that carried electric power into furnaces for smelting. They were basic to the Welland operations, but Canada did not produce any electrodes: they came from Europe — Norway, mostly — and Darte did not like being at the mercy of remote, foreign suppliers.

As a result, in 1909, the Welland plant became the first in Canada to manufacture its own electrodes and, by 1913, production had increased enough to supply other local industries that were using electric arc furnaces. Some of the electrodes, 20 inches square, were the largest produced in North America.

This leadership position in electrodes was never lost. Ferroalloy production was phased out at Welland in 1974 and continued in Beauharnois and Chicoutimi, Quebec, but the Welland carbon and graphite facility has been continually expanded and improved and is one of the largest and most sophisticated plants of its type anywhere.

Enter "Carbide" Willson


Willson

The formative history of Union Carbide is studded with fascinating personalities, but Thomas "Carbide" Willson stands out.

Willson, who was born in 1860 not far from Welland, was responsible for more than 60 inventions but the most important was his discovery, in 1892, of a commercial way of making calcium carbide — hence his nickname — and its by-product, acetylene gas, which was used for lighting and then for cutting and welding in the world's industries.

Anxious to devote more attention to other projects, though, Willson sold his patents to Union Carbide, which built a calcium carbide plant in Welland in 1914.

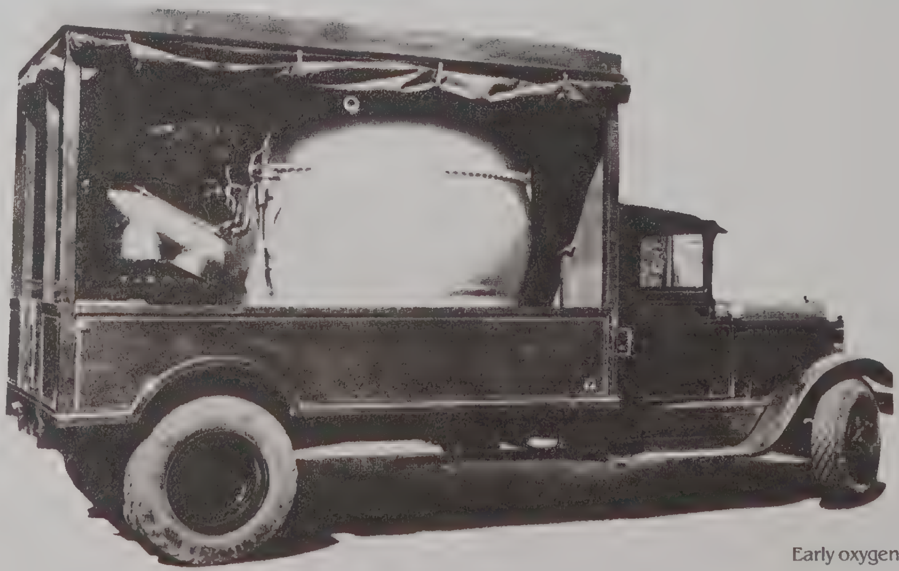
First, acetylene was the sole product from plants in Merritton, near St. Catharines, Ontario — which Willson had erected in 1910 — St. Boniface, near Winnipeg, and Shawinigan Falls, Quebec. But in 1920, the company became Canada's first commercial producer of oxygen from plants in Toronto and Montreal.

Tank trucks and high technology

Up to the early 1930's, all oxygen was transported under pressure in steel cylinders, which was practical — and still is — when used in relatively small quantities. For bulk orders, however, the high ratio of container weight to product weight made distribution costs prohibitive.

Union Carbide overcame the problem by purchasing German patents for production of oxygen in liquid form and developing its own equipment to transport and store it in large quantities.

Since then, Union Carbide has pioneered a long list of important developments in the production and distribution of atmospheric and specialty gases and the design of cutting, welding and metal treating equipment. It is also a leader in searching out new applications for its gas-based technology in markets ranging from steel, food and health care to petrochemical, refining and other energy resource industries.

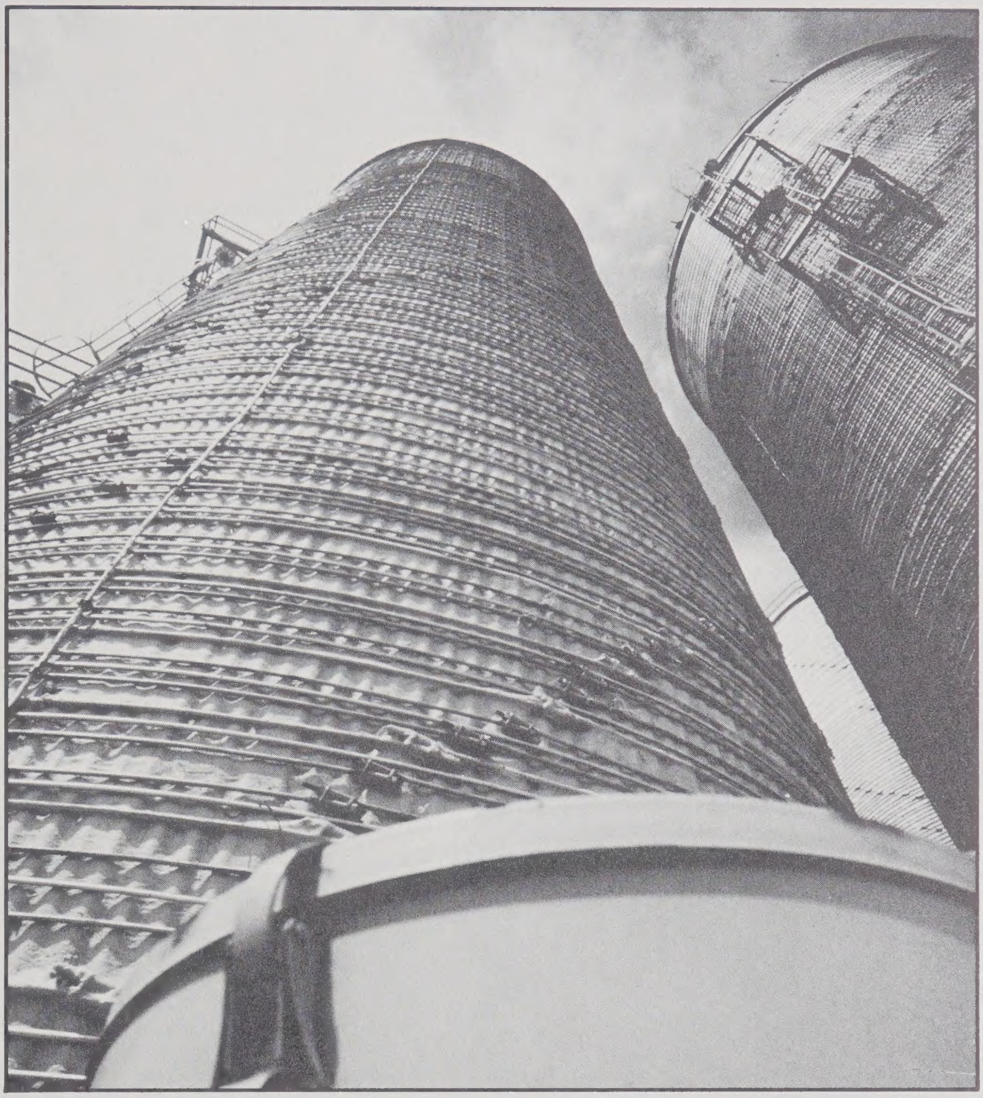

Early oxygen truck

Building a name in polyethylene

Polyethylene production at Union Carbide dates back to 1956, a year after the Montreal East plant was purchased. At first, a polyethylene compounding unit, using imported raw material, was installed. Then, a year after that, the first polyethylene reactor was started up.

Polyethylene, the most-used of all plastics, has played a part in an almost countless collection of endeavours, some more spectacular than others. For example, when the British Post Office laid a new, more efficient trans-Atlantic communications cable between the U.S. and U.K. in 1963, the Montreal East plant was chosen to supply the special grade of polyethylene for the cable's casing. This prestigious contract led to others, including another communications cable from Australia to New Zealand.

A world-scale polyethylene plant began operating near Sarnia, Ontario in 1977. At that time, Union Carbide was making about half of the polyethylene in Canada and the new plant approximately tripled the company's production capacity.



Polyethylene storage silos, Moore Township

A neater way of taking out the garbage

The garbage bag, developed in Canada by Union Carbide, was test-marketed in Toronto and Montreal in the mid-1960's. The leak-proof, easily fastened, lightweight polyethylene bags were much more convenient than metal garbage cans and gave neighborhoods a neater, cleaner appearance on garbage day.

Not only that, they reduced back injuries among garbage men, stepped up the rate of collection by 30 per cent and cut collection costs by 20 per cent.

In 1970, the bags were marketed for the first time in Canada under the GLAD trade name, now a household word far beyond this country's borders.

Anti-freeze goes on sale

First boost for battery business

The forerunner of Union Carbide's battery products business built a plant in Toronto in 1920 and, five years later, opened one of Ontario's first radio stations, CKNC. The idea was to encourage the use of radio sets, which were all battery-powered at that time.

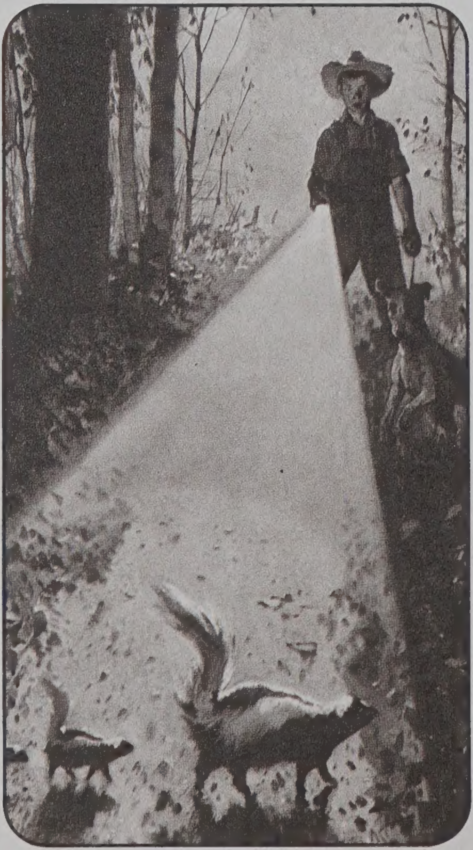
When widespread electric power distribution made console battery sets obsolete, EVEREADY continued to innovate — with a revolutionary "air cell" that opened up an entirely new power source for science and industry in the Thirties, for example, and a small, high-output power pack that made lightweight, portable radios possible in the Forties.

A new age of motoring

At one time, most Canadian motorists put their cars up on blocks from Thanksgiving to Spring and those who did venture onto snowy roads used everything from honey and sugar to molasses and alcohol to keep their engine blocks from cracking in the cold.

Then, in 1927, Union Carbide introduced the first ethylene-glycol based anti-freeze to Canada. Marketed under the PRESTONE name, it sold in handy cans with informative charts showing the amount of protection given by various quantities. It wouldn't boil away or burn and had no smell, all of which made it a motoring revolution.

1930's EVEREADY flashlight advertisement



Union Carbide and the hot dog

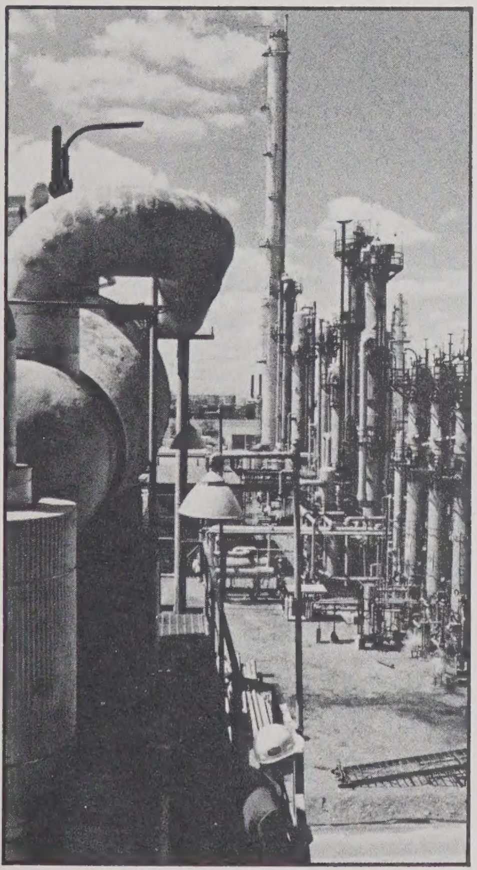
The company's Lindsay, Ontario plant was opened in 1949 and is still the sole Canadian producer of the casings in which wieners and other processed meat products are formed and cooked.

Re-organization, then the company goes public

In 1954, the various branches of the organization were combined under the present corporate name; they were Carbide Chemicals Company, Dominion Oxygen Company, Electro Metallurgical Company, National Carbon Company and Bakelite Company. A few years later, the managements of these divisions were brought together in a new head office building in Toronto.

Union Carbide offered its shares to the public in 1964 in what was, at the time, the largest issue of common shares on Canadian stock exchanges.

Montreal East petrochemical plant



Head office

Into petrochemical production

In 1955, the major event of Union Carbide's year was the purchase of a petrochemical plant in Montreal East.

The facility was soon refurbished and a new, more efficient production technology was introduced — the initial of a series of frequent modifications and expansions which have continued throughout the plant's history.

Many important Canadian "firsts" have also stemmed from this installation. For example, a process that produced higher-performance flexible urethanes at less cost — for applications like seating — is a technology that is now used throughout the world.

While ethylene glycol — for anti-freeze and polyester fibre — is the largest volume chemical manufactured, other uses for the plant's chemicals are widely varied and, inevitably, several are tied to the emerging energy industry.

Today and the future

With roots that go back 75 years, Union Carbide remains one of Canada's "youngest" enterprises — in terms of its outlook and also because a large percentage of its fixed assets is recent investment. Consequently, all businesses are equipped with state-of-the-art production facilities and this will be a dominant factor in taking sales close to the $1.5 billion mark within the next five years.

Today, Union Carbide's innovative technology is more important than ever — especially in helping to recover and process energy resources and use them to better effect.

In the area of resource recovery, one Union Carbide process uses nitrogen at high pressure to split open rock fissures that hold oil and gas; another uses nitrogen to clean the inside of pipelines; and an oxygen process being developed by Union Carbide and an oil company causes a carefully controlled underground fire that decreases the viscosity of oil so it can be brought to the surface more easily.

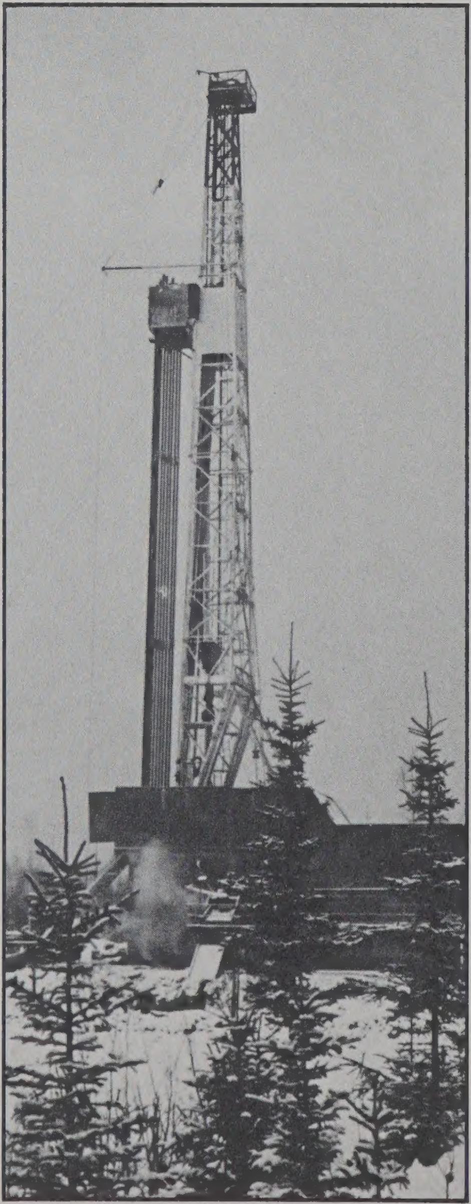
Chemicals have long been integral to the energy industry but more recent developments include an anti-dusting compound that's sprayed on the surface of coal being shipped by rail so the dust doesn't spread to surrounding land. And in the Alberta oil sands mining project, ethylene glycol has recently been found useful in removing sticky ores from conveyor belts.

As well, Union Carbide's record of introducing processes that conserve energy continues to lengthen. In 1982, for example, it will install a revolutionary, patented polyethylene production process at Moore Township that uses only a quarter of the energy of conventional systems.

Polyethylene itself is a good example of how to use energy wisely; most oil and gas is burned away as fuel but a small portion of total consumption — about 4.5 per cent — is upgraded into more valuable products like polyethylene and, in turn, into finished goods. Similarly, ethylene glycol for anti-freeze and synthetic fibre will be produced from components of natural gas at a $320 million plant that Union Carbide — long a pioneer in ethylene glycol technology — will build in central Alberta by 1984. It will be the most efficient of its type in the world.

But energy is only one sector of the economy, of course. Multiply that by all the other sectors where Union Carbide technology is now at work — food, transportation, construction, clothing, health care and more — and the picture becomes clear: the innovations of the past were the relatively small beginnings of a remarkable future.

Energy sector is major area of opportunity for Union Carbide



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1907-1982

UNION CARBIDE

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